

Notice of Allowability

Application No.

10/081,423

Examiner

Marcos L. Torres

Applicant(s)

ROUX ET AL.

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8-8-05.
2. ☒ The allowed claim(s) is/are 1-8 and 14-21.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Kanega (34,639) on September 15, 2005.

The application has been amended as follows:

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (New) System for communicating on an uplink between a user equipment and a first radio network controller of a cellular network infrastructure comprising an active set of base nodes which each receive radio signals transmitted by the said user equipment, comprising:

- means for generating, in each base node of the active set, at least a first frame of soft bits on the basis of the received radio signals and a corresponding first frame of hard bits ;

- means for transmitting in the cellular network infrastructure, from each base node of the active set, an accuracy indicator which results from an error check on the frame of hard bits ;

- means for transmitting, to the first radio network controller, the said first frame of hard bits from a base node whose accuracy indicator has a so-called good level, if at least one accuracy indicator has the said good level ;

- means for transmitting, to the first radio network controller if no accuracy indicator has the said good level, each of the first frames of soft bits from at least two base nodes and means for combining in the first radio network controller the transmitted frames of soft bits in order to generate a second frame of hard bits.

15. (New) System according to claim 14, wherein:

- the means for transmitting each accuracy indicator in the cellular network, infrastructure for the said uplink are arranged for transmitting it to the first radio network controller;

- the said first radio network controller having means for, if it receives at least one accuracy indicator of good level, choosing that one of the base nodes whose accuracy indicator has the good level and requesting the chosen base node to transmit to it the said first frame of hard bits ;

- the said first radio network controller having means for, if it does not receive any accuracy indicator of good level, choosing at least two base nodes and requesting them to transmit to it their frames of soft bits.

16. (New) System according to claim 15, wherein, among the nodes whose accuracy indicator has the good level, the said first radio network controller comprises means for choosing the one from which it has first received the accuracy indicator.

17. (New) System according to claim 15, wherein, among the nodes whose accuracy indicator has the good level, the first radio network controller comprises means for choosing the one that meets filtering criteria.

18. (New) System according to claim 15, comprising:

- means for transmitting in the said cellular network, from at least two base nodes of the active set to the first radio network controller, a quality indicator which results from a measurement of the signal received by the said base node;

- means for choosing, in the said first radio network controller, at least two base nodes with the best quality indicators received and means for requesting the chosen base nodes to transmit, to the said first radio network controller, the frames of soft bits from each chosen base node

19. (New) System according to claim 14, wherein:

- the means for transmitting each accuracy indicator from another base node in the cellular network infrastructure for the said uplink, are arranged for transmitting it to at least one base node of the said active set;

- each base node comprises means for applying rules established between the base nodes to the quality indicators that it receives and transmits, in order to decide to transmit or not to transmit, to the said first radio network controller, the first frame of hard bits from that base node or the first frame of soft bits, in order that one of the first

frames of hard bits whose accuracy indicator has a said good level is transmitted from a base node or that the frames of soft bits are transmitted from at least two base nodes in the absence of an accuracy indicator with the said good level.

20. (New) System according to claim 14, wherein:

- the means for transmitting an accuracy indicator in the cellular network infrastructure are arranged for transmitting at least one accuracy indicator to a second radio network controller;
- the said second radio network controller comprises means for, if it receives an accuracy indicator with good level, transmitting this accuracy indicator of good level to the first radio network controller, choosing that one of the base nodes whose accuracy indicator has the good level, transmitting the accuracy indicator of good level to the first radio network controller and requesting the chosen base node to send to it the said first frame of hard bits to provide for a transmission to the first radio network controller;
- the said second radio network controller comprises means for, if it does not receive an accuracy indicator of good level, choosing at least one base node and requesting it to send to it its frame of soft bits to provide for a transmission to the first radio network controller.

21. (New) System according to claim 14, furthermore comprising the following means executed in a base node comprising a base controller and grouping several base stations:

- means for generating, in at least one base station of the base node, a third frame of soft bits on the basis of the radio signal received from the user equipment by the said base station for the said uplink and a third frame of hard bits ;

- means for transmitting in the base node, from each base station receiving the radio signal for the said uplink, a local accuracy indicator that results from an error check on the frame of hard bits ;

- means for transmitting, to the base controller, the third frame of hard bits from a base station whose local accuracy indicator has the said good level, if at least one local accuracy indicator has the said good level ;

- means for transmitting, to the base controller, if no local accuracy indicator has the said good level, the frame of soft bits from at least one base station and means for combining in the base controller of the frames of soft bits transmitted and means for generating a fourth frame of hard bits ;

- means for generating, in the base controller, the accuracy indicator to be transmitted in the cellular network infrastructure such that the said accuracy indicator has the best level between that of the local accuracy indicator and the one that results from an error check on the fourth frame of hard bits.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: see applicant's arguments filed on August 8, 2005, pages 2-4.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any response to this Office Action should be mailed to:

U.S. Patent and Trademark Office
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

571-273-8300

for formal communication intended for entry, informal communication or draft communication; in the case of informal or draft communication, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcos L. Torres whose telephone number is 571-272-7926. The examiner can normally be reached on 8:00am-6:00 PM alt. Wednesday Off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on 571-252-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marcos L Torres
Examiner
Art Unit 2687

mlt


9/19/05
LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER